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10/547,335

09/01/2005

Kiyoshi Kanazawa

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EXAMINER

NADKARNI, SARVESH J

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

08/30/2007

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/547,335

Applicant(s)

KANAZAWA ET AL.

Examiner

Sarvesh J. Nadkarni

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in-condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 09/01/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

**This Office Action is in response to the application filed under 35 U.S.C. 371(c) on September 1, 2005, Application Number: 10/547,335 (hereinafter referred to as “application”) Publication Number: US 2006/0156235 A1. The application is in the national examination stage of PCT/JP04/02546, filed on March 2, 2004, Publication Number: WO/2004/081778 published on September 29, 2004. Page and line number references made in this action relate to the originally filed application, not to either publication. Claims 1-20 have been cancelled in a Preliminary Amendment filed by applicant on September 1, 2005. Claims 21-39 were added in said Preliminary Amendment and are currently pending. Receipt is acknowledged of the information disclosure statement filed on September 1, 2005.**

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Claim Objections***

2. Claim 23 is objected to because of the following informalities: the element “induction mark” does not follow proper antecedent basis format; the article “a” or “an” is used to introduce an element, whereas “the” or “said” is used to refer to a previously introduced element or step. “[I]nduction mark” was previously introduced in claim 21, upon which claim 23 depends. Appropriate correction is required.

*Claim Rejections - 35 USC § 103*

3. Claims 21, 22, 23, 24, 31, 36, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanaoka et al., United States Patent Number 6,104,396 (hereinafter referred to as Hanaoka '396") and further in view of Canaday et al., United States Patent Number 6,064,387 (hereinafter referred to as "Canaday '387").

4. With regard to claim 21, Hanaoka '396 clearly teaches a **data input apparatus** (see FIG. 2 generally, further described at column 6, lines 38-54), **characterized by including: a first operating means for directly inputting at least either of numerical data and character data** (see FIG. 2, further described at column 6, lines 38-54, numerical keys 27); **a second operating means for executing an operation except a direct input of numerical data and character data** (see FIG. 2, further described at column 6, lines 38-54, any and/or all of the following: function switches 25, scroll button 26, operation keys 28, execution/correction key 30); **an inducing means** (see column 14, lines 15-30, CPU 1) **for blinking on and off an induction mark** (see column 14, lines 15-30 describing character code "DIAL", further depicted at FIGs. 20 and 21) **which is used to induce a user's gaze onto the first operating means when a data input is started by the first operating means** (see column 14, lines 15-30); **a displaying means** (see FIG. 2, LCD 2) **for displaying data which is inputted by the first operating means** (see FIG. 2, LCD 2, described at column 6, lines 38-54, additionally described at column 13, lines 56-67 further continued at column 14, lines 1-49, further detailed at column 14, lines 20-25); **and a cursor displaying means** (see column 14, lines 15-30, CPU 1) **for displaying a blinking cursor in the displaying means** (see column 14, lines 15-30).

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5. However, Hanaoka '396 differs from the claimed invention in that Hanaoka '396 does not fully teach **blinking on and off [said] induction mark and the inducing means synchronizing a blink of the blinking cursor and a blink of the induction mark.**

6. In the same field of endeavor, Canaday '387 clearly teaches **blinking on and off [said] induction mark** (see column 1, lines 51-60, describing icon flashing) and **the inducing means synchronizing a blink of the blinking cursor and a blink of the induction mark** (see column 1, lines 51-60 describing icon and cursor blinking in sync).

7. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have been motivated to incorporate the blinking icon and synchronization of blinking as taught by Canaday '387 into the display and input apparatus of Hanaoka '396 because all are within the same field of endeavor and additionally both notify the operator of a change in operation status and encourage action (see Hanaoka '396, column 1 lines 51-55, column 14, lines 15-30; see also Canaday '387 at column 1 lines 34-45).

8. With regard to claim 22, Hanaoka '396 in view of Canaday '387 clearly teaches **the data input apparatus according to claim 21.**

9. However, Hanaoka '396 in view of Canaday '387 differs from the claimed invention in that Hanaoka '396 in view of Canaday '387 does not fully teach **the induction mark is disposed so that the distance between the induction mark which is blinked on and off by the inducing means and the first operating means is shorter than the distance between the blinking cursor which is displayed by the cursor displaying means and the first operating means.**

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10. It would have been obvious design choice to one having ordinary skill in the art at the time the invention was made to **dispose the distance between the induction mark which is blinked on and off by the inducing means and the first operating means shorter than the distance between the blinking cursor which is displayed by the cursor displaying means and the first operating means** in order to gain the commonly understood benefits of such adaptation such as simplified operation or user preferences (see Hanaoka '396, FIG. 2, and as stated in column 24 lines 50-57, the numerical keys 27 may be placed to the left of the LCD 2 placing it closer to the "DIAL" marking without loss of the spirit of the invention's essential characteristics).

11. With regard to claim 23, Hanaoka '396 in view of Canaday '387 clearly teaches **the data input apparatus according to claim 21** (see above), **characterized in that the inducing means blinks on and off, in the displaying means** (see Hanaoka FIG. 2, LCD 2 and additionally see Canaday '387, column 1, lines 51-60, describing icon flashing), **an induction mark for inducing a user's gaze onto the first operating means** (see Hanaoka '396 see column 14, lines 15-30).

12. With regard to claim 24, Hanaoka '396 in view of Canaday '387 clearly teaches the **data input apparatus according to claim 23** (see above).

13. However, Hanaoka '396 in view of Canaday '387 differs from the claimed invention in that Hanaoka '396 in view of Canaday '387 does not fully teach **the induction mark which is blinked on and off by the inducing means is disposed closer to the first operating means than the middle of the displaying.**

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14. It would have been an obvious matter of design choice to one having ordinary skill in the art at the time the invention was made to have **the induction mark which is blinked on and off by the inducing means disposed closer to the first operating means than the middle of the displaying means** in order to gain the commonly understood benefits of the adaptation such as simplified operation or user/operator preferences (see Hanaoka '396, FIG. 2, and as stated in column 24 lines 50-57, the numerical keys 27 may be placed to the left of the LCD 2 placing it closer to the "DIAL" marking, not in the middle, without loss of the spirit of the invention's essential characteristics).

15. With regard to claim 31, Hanaoka '396 in view of Canaday '387 clearly teaches **the data input apparatus according to claim 21, characterized in that the inducing means displays the induction mark synchronously when the blinking cursor is displayed and does not display the induction mark synchronously when the blinking cursor is not displayed** (see Hanaoka '396 at column 14, lines 15-30, both cursor and "DIAL" mark are displayed synchronously when operator is attempting to dial and not displayed synchronously when operator is not attempting to dial).

16. With regard to claim 36, it is similarly analyzed as claim 21 above. The **data input program** of claim 36 functions to create the anticipated results as that of the apparatus of claim 21. Therefore claim 36 is rejected under the same rationale as claim 21.

17. With regard to claim 37, it is similarly analyzed as claim 21 above. The **computer-readable recording medium in which a data input program is recorded** of claim 37 functions to create the anticipated results as that of the apparatus of claim 21. Therefore claim 37 is rejected under the same rationale as claim 21.

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18. With regard to claim 38, it is similarly analyzed as claim 21 above. The **data input method** of claim 38 functions to create the anticipated results as that of the apparatus of claim 21. Therefore claim 38 is rejected under the same rationale as claim 21.

19. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanaoka '396 in view of Canaday '387 as applied to claim 23 above, and further in view of Hamanaka United States Patent Number US 6,931,442 B1 hereafter referred to as ("Hamanaka '442").

20. With regard to claim 25, Hanaoka '396 in view of Canaday '387 clearly teaches **the data input apparatus according to claim 23** (see above).

21. However, Hanaoka '396 in view of Canaday '387 differs from the claimed invention in that Hanaoka '396 in view of Canaday '387 does not fully teach **the induction mark includes a figure which represents the shape of the first operating means**.

22. In the same field of endeavor, Hamanaka '442 clearly teaches **the induction mark includes a figure which represents the shape of the first operating means** (see column 9 lines 30-36).

23. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have been motivated to incorporate the figure as taught by Hamanaka '442 into the apparatus of Hanaoka '396 in view of Canaday '387 because all are within the same field of endeavor and furthermore, Hamanaka '442 uses the figure to indicate an operation state to the user/operator and improving operability as similar to the goal and scope of all references and application (see Hamanaka '442 at 35- 51).



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24. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanaoka '396 in view of Canaday '387 as applied to claim 23 above, and further in view of Chaco et al., United States Patent Application Publication Number US 2002/0044043 A1 (hereinafter referred to as "Chaco Publication").

25. With regard to claim 26, Hanaoka '396 in view of Canaday '387 clearly teaches **the data input apparatus according to claim 23.**

26. However, Hanaoka '396 in view of Canaday '387 differs from the claimed invention in that Hanaoka '396 in view of Canaday '387 does not fully teach **the induction mark includes a figure which represents the direction where the first operating means is located.**

27. In the same field of endeavor, the Chaco Publication clearly teaches **the induction mark includes a figure which represents the direction where the first operating means is located** (see FIG. 9 in conjunction with page 14, paragraph [0145] describing direction indicator).

28. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have been motivated to incorporate the direction indicator as taught by the Chaco Publication into the apparatus of Hanaoka '396 in view of Canaday '387 because all are within the same field of endeavor and furthermore, the Chaco Publication clearly improves generally accepted benefits of improved communication between the apparatus and user/operator (see Chaco Publication at page 14 paragraph [0145]).

29. Claims 27, 28, 29, 30, 32 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanaoka '396 in view of Canaday '387 as applied to claim 21 above, and

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further in view of Wittstein et al., United States Patent Number 5,631,947 (hereinafter referred to as "Wittstein '947").

30. With regard to claim 27, Hanaoka '396 in view of Canaday '387 clearly teaches **the data input apparatus according to claim 21** (see above).

31. However, Hanaoka '396 in view of Canaday '387 differs from the claimed invention in that Hanaoka '396 in view of Canaday '387 does not fully teach **the inducing means stops blinking on and off an induction mark for inducing a user's gaze onto the first operating means when an operation of the first operating means is started**.

32. In the same field of endeavor, Wittstein '947 clearly teaches **the inducing means stops blinking on and off an induction mark for inducing a user's gaze onto the first operating means when an operation of the first operating means is started** (see column 14, lines 5-16).

33. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have been motivated to incorporate the stopping ability as taught by Wittstein '947 into the apparatus of Hanaoka '396 in view of Canaday '387 because all are within the same field of endeavor and furthermore, Wittstein '947 clearly improves operation through visual communication of operating status and a reduction of operator input error, both consistent goals within the art.

34. With regard to claim 28, Hanaoka '396 in view of Canaday '387 further in view of Wittstein '946 clearly teaches **the data input apparatus according to claim 21** (see above) **that the inducing means stops blinking on and off the induction mark when at least either of numerical data and character data is displayed by the displaying means** (see Wittstein '947 column 14, lines 5-16, box stops blinking).

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35. With regard to claim 29, Hanaoka '396 in view of Canaday '387 further in view of Wittstein '946 clearly teaches **the data input apparatus according to claim 27** (see above), **characterized in that the inducing means turns on the light of the induction mark after stopping blinking on and off the induction mark** (see Wittstein '946 at column 14, lines 10-16, describing the box blinking and then stopping after initial input and staying on until 'ENTER' key is input).

36. With regard to claim 30, Hanaoka '396 in view of Canaday '387 further in view of Wittstein '946 clearly teaches **the data input apparatus according to claim 21** (see above), **characterized in that the inducing means turns off the light of the induction mark for inducing a user's gaze onto the first operating means when an operation of the first operating means is completed** (see Wittstein '946 at column 14, lines 5-16, describing the box blinking and then stopping after initial input and staying on until 'ENTER' key is input).

37. With regard to claim 32, Hanaoka '396 in view of Canaday '387 further in view of Wittstein '946 clearly teaches **the data input apparatus according to claim 21, characterized in that the inducing means does not display the induction mark synchronously when the blinking cursor is displayed** (see Canaday '387, column 1, lines 51-60, for asynchronous displaying) **and displays the induction mark synchronously when the blinking cursor is not displayed** (see Wittstein '946, column 14, lines 5-50, the cursor blinks initially, but after input, stops blinking).

38. With regard to claim 39, Hanaoka '396 in view of Canaday '387 further in view of Wittstein '946 clearly teaches **the data input apparatus according to claim 28** (see above), **characterized in that the inducing means turns on the light of the induction mark after**

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**stopping blinking on and off the induction mark** (see Wittstein '946 at column 14, lines 5-50, describing the box blinking and then stopping after initial input and staying on until 'ENTER' key is input).

39. Claims 33, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanaoka '396 in view of Canaday '387 as applied to claim 21 above, and further in view of Adams, United States Patent Number US 6,400,814 B1 (hereinafter referred to as "Adams '814").

40. With regard to claim 33, Hanaoka '396 in view of Canaday '387 clearly teaches **the data input apparatus according to claim 21.**

41. However, Hanaoka '396 in view of Canaday '387 differs from the claimed invention in that Hanaoka '396 in view of Canaday '387 does not fully teach **that the inducing means includes an induction lamp near the first operating means and blinks on and off the induction lamp as an induction mark for inducing a user's gaze onto the first operating means.**

42. In the same field of endeavor, Adams '814 clearly teaches **characterized in that the inducing means includes an induction lamp near the first operating means and blinks on and off the induction lamp as an induction mark for inducing a user's gaze onto the first operating means** (see column 3, lines 50-57, describing a backlight capable of flashing and illuminating the digit keypad).

43. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have been motivated to incorporate the backlight system as taught by

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Adams '814 into the apparatus of Hanaoka '396 in view of Canaday '387 because all are within the same field of endeavor and furthermore, improves utility of the device by providing additional ways to indicate operating status to the user (see Adams '814 column 2, lines 3-9).

44. With regard to claim 34, Hanaoka '396 in view of Canaday '387 further in view of Adams '814 clearly teaches **the data input apparatus according to claim 33, characterized in that the induction lamp illuminates the operation surface of the first operating means when the induction lamp is lit** (see Adams '814 column 2, lines 3-9).

45. With regard to claim 35, Hanaoka '396 in view of Canaday '387 further in view of Adams '814 clearly teaches **the data input apparatus according to claim 33**.

46. However, **Hanaoka** '396 in view of Canaday '387 further in view of Adams '814 differs from the claimed invention in that Hanaoka '396 in view of Canaday '387 further in view of Adams '814 does not fully teach **the inducing means blinks on and off the induction lamp by allowing electric power which is supplied to the induction lamp to be intermittent**.

47. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the **electric power which is supplied to the induction lamp to be intermittent** through devices such as the switching transistor as described in Hanaoka '396 because a transistor (see Hanaoka '396 at column 17, lines 29-37), among other methods, was commonly known in the art to provide on/off lighting functioning and was consistently used for switching purposes in order to gain the commonly understood benefits of such adaptation including decreased size and simplified, dependable operation.

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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarvesh J. Nadkarni whose telephone number is 571-270-1541. The examiner can normally be reached on 8:00-5:00 M-Th EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-273-1550. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sarvesh J. Nadkarni  
Examiner, Art Unit 2629

  
AMARE MENGISTU  
SUPERVISORY PATENT EXAMINER